

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

June 8, 2012

Via E-mail
Duncan J. Palmer
Chief Financial Officer
Owens Corning
One Owens Corning Parkway
Toledo, OH 43659

Re: Owens Corning

Form 10-K for the Year Ended December 31, 2011

Filed February 15, 2012

File No. 1-33100

Dear Mr. Palmer:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2011

General

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. These revisions should be included in your future filings, including your interim filings.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 22

Results of Operations, page 23

2. We note that approximately 43% of your earnings before taxes are generated outside of the United States and that you have significant operations overseas. However, your MD&A does

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not seem to quantify or discuss in detail the impact that changes in currency exchange rates had on your results of operations, financial condition and liquidity. Using your 2011 MD&A as an example, please show us how you will revise your MD&A in future filings to more comprehensively address the effects that changes in currency exchange rates had on your business. Please refer to the SEC's Financial Reporting Codification Section 501.09.b

3. Please revise both your consolidated and segment MD&A as necessary to describe, with quantification, the business reasons for fluctuations in each of your material income statement line items. For example, your discussion of consolidated gross margin could be enhanced to provide more specific information such as the percentage by which you increased selling prices or how you measure improvements to manufacturing productivity. Furthermore, your current discussion of earnings before interest and taxes describes a \$17 million charge in 2011 that was the result of "evaluating market conditions" in your Insulation business. It is unclear what this statement means, what the \$17 million charge represents and what prompted management to evaluate the need for the charge. Please show us how you will revise your future filings accordingly.

Liquidity, Capital Resources and Other Related Matters, page 31

4. Please revise to quantify the amount of cash and short term investments held by foreign subsidiaries as of each period presented. Please also disclose, if true, that you would need to accrue and pay taxes if repatriated and that you do not intend to repatriate these funds. Additionally, please disclose the nature and extent of any restrictions on your ability to transfer these funds to the United States.

Consolidated Financial Statements, page 48

Note 2 – Segment Information, page 59

- 5. Please revise to provide the product disclosures required by ASC 280-10-50-40.
- 6. So that we may better understand your segment reporting, please describe for us:
 - Your organizational structure;
 - How you define your operating segments; and
 - If applicable, the manner in which you aggregated multiple operating segments into two reportable operating segments. If you aggregate multiple operating segments into your two reportable operating segments, please explain which operating segments have been aggregated and how they meet the aggregation criteria of ASC 280-10-50-11.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

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In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Lisa Etheredge, Staff Accountant, at (202) 551-3424 or the undersigned at (202) 551-3769 if you have questions.

Sincerely,

/s/ Rufus Decker

Rufus Decker Accounting Branch Chief